

INTEGRATING PARTICLE RENDERING AND THREE-DIMENSIONAL GEOMETRY RENDERING

ABSTRACT OF THE DISCLOSURE

[0037] Images from geometry renderers and particle renderers are composited by incorporating geometry information from the geometry image as a number of special cutout particles in the particle renderer. Instead of contributing to the color and opacity of pixels in the particle-rendered image, these cutout particles occlude or subtract from the accumulated color and opacity of those pixels. In this way, depth resolution is performed as part of the particle rendering process, and the geometry and particle images may be combined using a simple process such as alpha blending. In one embodiment, the cutout particles are obtained from a depth map associated with the geometry image.